National Institutes of Health
Clinical Center
Nursing and Patient Care Services

PROCEDURE: BLOOD PRODUCTS: ADMINISTRATION

Approved by:

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|---|---|
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**PROCEDURE**: **Blood Products Administration**

**ESSENTIAL INFORMATION**:

1. Laboratory and Transfusion Medicine Test Guide, http://www.cc.nih.gov/dtm/dtm-only/DTM_ordering_guide_org.htm
2. Circular of Information for the Use of Human Blood and Blood Components. American Association of Blood Banks http://www.aabb.org/all_about_blood/coi/aabb_coi.htm (Printed copy available on request from DTM)

**EQUIPMENT**:

**Specimen collection:**

6mL plastic lavender top tube
Typenex band
Blood drawing materials
Flush solution, if applicable
Three-way stopcock, if applicable

**Blood product administration:**

Blood product administration set
Volumetric infusion pump
0.9% Sodium Chloride IV solution and tubing for flush
Three-way Stopcock
Leukocyte reduction filter (if indicated by DTM))

**SPECIMEN COLLECTION**

| STEPS | KEY POINTS |
|---|---|
| 1. Verify physician order for type and crossmatch. | 1. |
| 2. If the patient is already wearing a Typenex bracelet, check date to see if it is still valid.<br>a. If the infusion is scheduled to take place within 3 days after the specimen was drawn, then skip Steps 3-8. Do not apply new Typenex bracelet and do not collect a new specimen.<br>b. If the infusion is scheduled to take place after the current sample expires, remove the old Typenex bracelet and continue with Steps 3-8 below. | 2. The cross-match sample expires on 11:59 p.m. on the third day after the blood is drawn, e.g. a sample drawn anytime Tuesday, the 23rd, will expire at 11:59 p.m. on Friday, the 26th. |
| 3. Place patient label on 6 mL lavender top tube. Patient label includes patient first and last name, hospital ID#, and date of birth. | 3. If the patient's first or last name is truncated on the label, handwrite the missing information on the label or use the addressograph plate (if complete) to make a new label. |
| 4. Prepare Typenex band per instructions in Appendix D. Use a ballpoint pen and press hard when writing:<br>a. Patient's first and last name<br>b. Patient ID number<br>c. Date specimen collected, and<br>d. Initials of person collecting specimen. | 4. Patient information must be visible on the white portion of the Typenex band. |

| STEPS | KEY POINTS |
|---|---|
| 5. Using the following procedure, two (2) licensed health professionals then validate the accuracy of the handwritten Typenex band:<br><br>a. The nurse who prepared the Typenex band will read aloud from a Medical Care Plan or the medical order each letter of the patient's first and last name, and each digit of the patient's ID number to a 2nd licensed health professional who THEN compares this to the handwritten Typenex band.<br>b. In addition, the 2nd licensed health professional visually compares the Typenex band against the patient's hospital-generated label affixed to the specimen tube to validate both are identical. | 5. For patient safety and to accurately identify the "*right patient*, the patient's first and last name must be complete and spelled correctly. Blood samples with inaccurate, incomplete, or illegible information are rejected. A new sample will then need to be drawn and properly labeled.<br><br>a. Both the Typenex Band and hospital-generated labels must be identical. |
| 6. For patient safety and to accurately identify the "right patient" prior to drawing a blood specimen, compare the patient's identification band against hospital records and/or hospital-generated labels for patient's first and last name and date of birth. Alternatively, if the patient does not have a hospital identification band, ask the patient or parent/guardian to state the patient's full name and date of birth, according to MAS M03-1: Patient Identification. | 6. The major cause of acute transfusion-related death is error in identification. Accurate patient identification is an important step in the transfusion procedure. The Typenex system provides a source of positive identification for blood samples collected for type and crossmatch. |
| 7. Collect blood specimen in 6 mL lavender top tube. If venipuncture required, use 20 gauge needle or larger for adults and a 22-or 23-gauge needle for children. | 7. To prevent hemolysis of the blood sample, a 22-gauge needle or larger should be used to obtain the blood sample. The minimum sample volume needed is 1 mL, with 1 mL – 6 mL being the range for all patients |
| 8. Apply Typenex band to patient per instructions in Appendix D.<br><br>Peel off Typenex specimen label and tail and apply to specimen tube prior to leaving the patient bedside. | 8. Each Typenex bracelet is coded with a unique number that makes it possible to trace patient identification from blood bank to phlebotomy, through cross-matching in the lab, to transfusion of the patient on the patient care unit.<br><br>Both the Typenex and hospital-generated labels must be identical. |

| STEPS | KEY POINTS |
|---|---|
| 9. For patient safety, instruct inpatients and outpatients NOT to remove the Typenex band.<br><br>Inpatients and outpatients must keep the Typenex band attached until their transfusion is completed. If the patient has removed the band, a new sample must be drawn using a new Typenex band and sent for repeat testing. | 9. Removing the band will result in significant delays in receiving blood products. The patient must be wearing the band with numbers which correspond to those on the blood bank sample and the unit to be transfused. This assures accurate patient identification and minimizes the possibility of sample mix-up and transfusion of blood products to the incorrect recipient.<br><br>If a Typenex band must be removed by a licensed health professional for clinical care or a clinical emergency (e.g., insertion of an arterial line or upper extremity edema), the Typenex band can be re-attached on an alternate upper or lower extremity as soon as clinically reasonable but before the end of the shift by the licensed health professional who removed it, in accordance with patient identification procedures. If the Typenex band cannot be reattached by the same licensed health professional due to a clinical emergency that requires immediate transfer of the patient, the individual who removed the Typenex band will hand it directly to the receiving nurse so that it can be promptly reattached after the clinical situation has stabilized.<br><br>The Typenex band is reattached using tape so that all identifying information remains visible. |

**BLOOD ADMINISTRATION**

| STEPS | KEY POINTS |
|---|---|
| 1. Check physician's transfusion order to determine:<br>a. product to be administered<br>b. number of units or volume to be administered<br>c. date to be administered<br>d. special processing<br>e. duration of infusion<br>f. pre-medication orders, if indicated | 1. Optimally, a patient is transfused in their assigned patient care unit.<br><br>If a patient must leave the PCU during a transfusion, they are accompanied by a licensed health professional competent to administer blood products and only after the first 15 minutes have been completed without complications.<br><br>When patient's care is transferred during a transfusion (e.g., transfer to Department of Radiology or to the OR/PACU), pre-arrangements are made to transfer care to a licensed health professional competent to administer blood products. |
| 2. For red blood cells or granulocytes, verify in the medical record, results of:<br>a. blood grouping<br>b. Rh type<br>c. number of units prepared | 2. |
| 3. Verify informed consent has been obtained and signed in the past 12 months, except for emergency transfusions by visualizing the signed consent document in the medical record. | 3. |

| STEPS | KEY POINTS |
|---|---|
| 4. Ensure patient has Typenex band, and the inpatient is also wearing hospital ID bracelet. | 4. Typenex band is not required when infusing plasma, platelets or cryoprecipitate because these products contain a minimal number of red blood cells. |
| 5. Establish or verify patency of peripheral or central venous access device. | 5. The lumen of needles or catheters used for blood transfusion should be large enough to allow appropriate flow rates without damaging the vein. |
| 6. Obtain and record patient's baseline vital signs. | 6. Febrile patients destroy cells rapidly. If febrile, notify physician to decide if transfusion can wait or if patient should receive acetaminophen as a pre- medication. |
| 7. Verify that emergency medications are readily available in the area where patient will receive treatment. | 7. |
| 8. Ensure emergency equipment is available in patient's room:<br>a. Oxygen<br>b. Suction machine<br>c. Vital sign monitor<br>d. 0.9% sodium chloride solution and administration set | 8. |
| 9. Verify that the patient is ready to be transfused. | 9. If pre-medication is indicated, allow 30 – 60 minutes for oral medications, 10 minutes for IV medications to become effective.<br><br>a. There should be a 4-hour time lapse between completing infusion of Amphotericin and beginning transfusion of granulocytes or vice versa. It is advisable that all other blood products be separated from Amphotericin by two hours. |
| 10. When the patient is ready, send a patient-specific CRIS Service Requisition DTM specifying product to be infused, whether infusion pump or gravity flow will be used, and other information as required. | 10. DTM will usually only release one blood product at a time. If the transfusion cannot be initiated promptly, the blood should be returned to DTM for storage unless transfusion can be completed within 4 hours. If returned, blood must be received back in DTM within 30 minutes of the time it was issued or the product will have to be discarded. This is to ensure that proper storage conditions are maintained. Blood products MUST NEVER be placed in the refrigerator on the patient care unit. |
| 11. Check the appearance of unit for presence of clots, clumps or abnormal cloudiness, and integrity of seals. | 11. If appearance is suspicious, return it to DTM, as it may not be appropriate for infusion. |

| STEPS | KEY POINTS |
|---|---|
| 12. Two licensed health professionals competent to administer blood products compare:<br>a. Blood product received on the PCU to blood product requested in the medical order.<br>b. Blood type and Rh type recorded in CRIS with the container bag and container label validating that they are either identical or compatible.<br>c. The blood product number on the blood container with the product number on the blood container tag.<br>d. Compare the expiration date and time, if present, on the blood container label to the current date and time. | 12.<br>a. All red blood cells, platelets and granulocytes are irradiated prior to infusion. Verify that a RadSure label is attached to the bag and reads "Irradiated".<br>b. All red blood cells and platelets are leuko-reduced prior to or concurrent with infusion. Verify that blood component tie tag states the component is leuko-reduced if applicable or is issued with a leukoreduction filter.<br>c. All identification attached to the container must remain attached until the transfusion has been terminated. |
| 13. Immediately before the transfusion, in the presence of the recipient, two licensed health professionals competent to administer blood identify the patient using these 2 forms of identification:<br><br>a. Compare the patient's identification band against hospital records and/or hospital-generated labels for patient's name and date of birth. Alternatively, if the patient does not have a hospital identification band, ask the patient or parent/guardian to state the patient's full name and date of birth, according to MAS 03-1: Patient Identification.<br><br>b. Verify the patient's name and medical record number on the blood unit with the information on the recipient's identification bracelet and the information recorded on the CRIS printout.<br><br>c. Verify the Typenex number matches the information on the patient's Typenex wristband and blood unit. | 13. The major cause of acute transfusion-related death is error in identification. Accurate patient and blood unit identification is an important step in the transfusion process. If any discrepancy is noted, notify DTM at once and return the blood product until the discrepancy is resolved.<br>a.<br>b.<br><br>c. If Typenex bracelet is NOT required e.g., platelet transfusions, the patient is accurately identified with the dispensed blood unit by comparing the patient's hospital identification bracelet against the blood component tag (patient's name and date of birth). Alternatively, if the patient does not have a hospital identification band, the patient is asked to state his name and date of birth. This information is compared against blood component tag. |
| 14.<br>a. Prime the administration set with the blood product or 0.9% sodium chloride solution.<br><br>b. May add a three-way stopcock onto the end of the blood administration set. Have 0.9% sodium chloride solution and IV tubing unopened and available in room for emergency use or attached to stopcock.<br><br>c. If a leukocyte reduction filter is indicated, follow the manufacturer's and DTM's instructions for set-up. | 14.<br>a. Use of other IV solutions damages blood components. DO NOT use D5W to prime or flush.<br><br>b. During a reaction, 0.9% sodium chloride solution may be administered through the stopcock without infusing the additional blood product in the tubing.<br><br>c. Leukocyte reduction filter may be used to prevent repeat febrile reactions, decrease the risk of CMV transmission, and decrease the risk of allo-immunization. Do not flush filter with 0.9% sodium chloride solution. One leukocyte reduction filter is used per unit of blood. Leukocyte reduction filters are not to be used when administering granulocytes. |

| STEPS | KEY POINTS |
|---|---|
| 15. Connect the blood administration set to the IV extension set either directly or through the intermittent infusion cap via needle-less system. | 15. |
| 16.<br><br>a. **For adults**: Adjust the rate of flow to 2-5 mL/min during the first five minutes of platelets or plasma infusions or 2 mL/min for the first 15 minutes for whole blood, PRBC, or granulocytes. Patient should be observed closely for the first 15 minutes.<br><br>b. **For pediatric patients**: Adjust the rate of flow to transfuse 5% of the total volume ordered in the first five (5) minutes of platelet or plasma infusion or in the first 15 minutes of whole blood, PRBCs or granulocyte infusion. Remain with the patient for the first 15 minutes after the start of the infusion. See Appendices A and B. | 16. Symptoms of an immediate adverse reaction are usually manifested during infusion of the initial 50 mL. If an incompatible transfusion is terminated early, acute renal necrosis and death may be prevented.<br><br>Optimally, a patient is transfused in their assigned patient care unit.<br><br>If a patient must leave the PCU during a transfusion, they are accompanied by a licensed health professional competent to administer blood products and only after the first 15 minutes have been completed without complications.<br><br>When patient's care is transferred during a transfusion (e.g., transfer to Department of Radiology or to the OR/PACU), pre-arrangements are made to transfer care to a licensed health professional competent to administer blood products.<br><br>a. A volumetric infusion pump may be used to administer blood products.<br><br>b. For pediatric patients, volume of blood products (excluding granulocytes) to be transfused should be ordered based on the child's weight, i.e. 10 - 15 mL/kg. See Appendices A and B. |
| 17. At the end of the first 15 minutes, obtain and record TPR and BP. If vital signs are within normal range and the patient has no signs/symptoms of an adverse reaction, change the rate to infuse the unit within the time period specified in the physician's order. | 17. The desirable rate of infusion depends upon patient's blood volume, cardiac status, and hemodynamic condition. Suggested rates for adults are:<br>a. PRBCs: 100-230 mL/hr<br>b. Granulocytes: 75-100 mL/hr<br>c. Plasma/platelets: 200 – 300 mL/hr<br>d. The volume of a platelet pheresis bag varies from 120 mL to 400 mL. The entire platelet product should be given within one hour, if possible.<br>e. Suggested rates for pediatric patients are:<br>• PRBCs: 2-5 mL/kg/hr (see Appendices)<br>• Granulocytes: over 2-3 hrs (based on 200 mL volume)<br>• Plasma: 1-2 mL/minute; over less than 4 hours<br>• Platelets: as tolerated |

| STEPS | KEY POINTS |
|---|---|
| 18.<br>a. Continue to monitor the patient for signs and symptoms of adverse reaction during transfusion and 1 hour post- transfusion.<br><br>b. If patient experiences a transfusion reaction while transfusion is in progress, immediately stop the transfusion. Maintain patency of line with 0.9% sodium chloride solution, notify LIP, and Department of Transfusion Medicine. | 18.<br>a. For outpatients, if unable to monitor for 1 hour after the transfusion, provide patient with information cards on "Delayed Transfusion Reactions" (see Appendix C).<br><br>b. Adverse transfusion reactions can occur anytime during or after the transfusion. See DTM website for treatment of adverse transfusion reactions. http://www.cc.nih.gov/dtm/dtm-only/DTM_ordering_guide_adversereact.htm |
| 19. Complete transfusion as ordered not to exceed four hours. Administration sets can be used for second unit of blood if the second transfusion can be completed within 4 hours of initial set-up of tubing. | 19. Increased possibility of contamination and decreased viability of cells if prolonged.<br>a. The administration set is changed every 4 hours.<br>b. To avoid obstructing the in-line filter, not more than 2 units of blood should be administered through an administration set. |
| 20. At the conclusion of a blood product transfusion in which no adverse reaction occurred:<br>a. Obtain 10 - 60 minute post transfusion CBC for post-count as indicated.<br>b. Flush the blood administration set with 0.9% sodium chloride solution until the tubing is clear.<br>c. Obtain and record vital signs.<br>d. Disconnect and discard the empty blood product container in a MPW box.<br>e. If the outpatient is unable to remain for one hour post-transfusion, provide information on "Delayed Transfusion Reactions: (Appendix C). | 20. Do not flush leukocyte filters with saline. |

**DOCUMENTATION**:

1. In addition to transfusion assessments described above, document:
   a. Pre-Transfusion –visual validation of signed transfusion consent in the patient's medical record
   b. Transfusion – blood component, product identification number, product's type/Rh, volume dispensed, who participated in the double-check process, who initiated the transfusion, the route and rate of transfusion, and start/end times.
   c. Post-Transfusion – blood component, product identification number, volume transfused, who completed the transfusion.
   d. Incomplete and/or a suspected adverse transfusion reaction including rationale for an incomplete transfusion and/or signs and symptoms observed and assessed, interventions and follow-up, and who was notified of the suspected reaction.

**REFERENCES:**

1. "Blood Transfusions: Playing It Safe", Nursing 96. 26 (4); 50 - 52. April 1996.
2. "Blood Transfusions: Keeping Your Patient Safe", Nursing 97. 27 (8); 34 - 42.
3. "Clinical Do's & Don'ts: Safely Administer a Blood Transfusion. Nursing 94.
4. Terry, J., et al (eds.) Intravenous Therapy; Clinical Principles and Practice. Philadelphia, W.B. Saunders Co., 1995.
5. Handbook of Infusion Therapy. Springhouse, Pa. Springhouse Corporation, 1999, (pp. 192-216).
6. Brecher, M. (ed.). Technical Manual. American Association of Blood Banks. Bethesda, 2002.

Appendix A:

## Packed Red Blood Cells Administration Grid (PRBC)
## (10 ml/kg)

| Patient Weight | Amount of PRBC (10 ml/kg) | Starting Rate (first 15 minutes) | 4 hr Infusion (2.5 ml/kg/hr) | 3 hr Infusion (3.4 ml/kg/hr) | Max Infusion Rate (5 ml/kg/hr) | *Normal Fluid Maintenance Rate |
|---|---|---|---|---|---|---|
| 3 kg | 30 ml | 6 ml/hr | 8 ml/hr | 10 ml/hr | 15 ml/hr | 13 ml/hr |
| 4 kg | 40 ml | 8 ml/hr | 10 ml/hr | 14 ml/hr | 20 ml/hr | 17 ml/hr |
| 5 kg | 50 ml | 10 ml/hr | 13 ml/hr | 17 ml/hr | 25 ml/hr | 21 ml/hr |
| 6 kg | 60 ml | 12 ml/hr | 15 ml/hr | 20 ml/hr | 30 ml/hr | 25 ml/hr |
| 7 kg | 70 ml | 14 ml/hr | 18 ml/hr | 24 ml/hr | 35 ml/hr | 29 ml/hr |
| 8 kg | 80 ml | 16 ml/hr | 20 ml/hr | 27 ml/hr | 40 ml/hr | 33 ml/hr |
| 9 kg | 90 ml | 18 ml/hr | 23 ml/hr | 31 ml/hr | 45 ml/hr | 38 ml/hr |
| 10 kg | 100 ml | 20 ml/hr | 25 ml/hr | 34 ml/hr | 50 ml/hr | 42 ml/hr |
| 11 kg | 110 ml | 22 ml/hr | 28 ml/hr | 37 ml/hr | 55 ml/hr | 44 ml/hr |
| 12 kg | 120 ml | 24 ml/hr | 30 ml/hr | 41 ml/hr | 60 ml/hr | 46 ml/hr |
| 13 kg | 130 ml | 26 ml/hr | 33 ml/hr | 44 ml/hr | 65 ml/hr | 48 ml/hr |
| 14 kg | 140 ml | 28 ml/hr | 35 ml/hr | 48 ml/hr | 70 ml/hr | 50 ml/hr |
| 15 kg | 150 ml | 30 ml/hr | 38 ml/hr | 51 ml/hr | 75 ml/hr | 52 ml/hr |
| 16 kg | 160 ml | 32 ml/hr | 40 ml/hr | 54 ml/hr | 80 ml/hr | 54 ml/hr |
| 17 kg | 170 ml | 34 ml/hr | 42 ml/hr | 58 ml/hr | 85 ml/hr | 56 ml/hr |
| 18 kg | 180 ml | 36 ml/hr | 45 ml/hr | 61 ml/hr | 90 ml/hr | 58 ml/hr |
| 19 kg | 190 ml | 38 ml/hr | 48 ml/hr | 65 ml/hr | 95 ml/hr | 60ml/hr |
| 20 kg | 200 ml | 40 ml/hr | 50 ml/hr | 68 ml/hr | 100 ml/hr | 63 ml/hr |
| 25 kg | 250 ml | 50 ml/hr | 63 ml/hr | 85 ml/hr | 125 ml/hr | 68 ml/hr |
| 30 kg | 300 ml | 60 ml/hr | 75 ml/hr | 102 ml/hr | 150 ml/hr | 73 ml/hr |
| 35 kg | 350 ml | ---------- | ---------- | ---------- | --------- | 78 ml/hr |
| 40 kg | 400 ml | ---------- | ---------- | ---------- | --------- | 83 ml/hr |
| 45 kg | 450 ml | ---------- | ---------- | ---------- | --------- | 88 ml/hr |
| 50 kg | 500 ml | ---------- | ---------- | ---------- | --------- | 94 ml/hr |

**Pediatric Infusion Rate:** 2 to 5 ml/kg/hr

*Maintenance rate is used only as a guideline.
For the non-compromised child, the infusion rate may be increased to 1.5 times the maintenance rate.

All Pediatric Oncology Patients should receive irradiated PRBC's

Appendix B:

## Packed Red Blood Cells Administration Grid (PRBC) (15 ml/kg)

| Patient Weight | Amount of PRBC (10 ml/kg) | Starting Rate (first 15 minutes) | 4 hr Infusion (3.4 ml/kg/hr) | Max Infusion Rate (5 ml/kg/hr | *Normal Fluid Maintenance Rate |
|---|---|---|---|---|---|
| 3 kg | 45 ml | 9 ml/hr | 10 ml/ hr | 15 ml/hr | 13 ml/hr |
| 4 kg | 60 ml | 12 ml/hr | 13 ml/hr | 20 ml/hr | 17 ml/hr |
| 5 kg | 75 ml | 15 ml/hr | 16 ml/hr | 25 ml/hr | 21 ml/hr |
| 6 kg | 90 ml | 18 ml/hr | 19 ml/hr | 30 ml/hr | 25 ml/hr |
| 7 kg | 105 ml | 21 ml/hr | 22 ml/hr | 35 ml/hr | 29 ml/hr |
| 8 kg | 120 ml | 24 ml/hr | 26 ml/hr | 40 ml/hr | 33 ml/hr |
| 9 kg | 135 ml | 27 ml/hr | 29 ml/hr | 45 ml/hr | 38 ml/hr |
| 10 kg | 150 ml | 30 ml/hr | 32 ml/hr | 50 ml/hr | 42 ml/hr |
| 11 kg | 165 ml | 33 ml/hr | 35 ml/hr | 55 ml/hr | 44 ml/hr |
| 12 kg | 180 ml | 36 ml/hr | 38 ml/hr | 60 ml/hr | 46 ml/hr |
| 13 kg | 195 ml | 39 ml/hr | 42 ml/hr | 65 ml/hr | 48 ml/hr |
| 14 kg | 210 ml | 42 ml/hr | 45 ml/hr | 70 ml/hr | 50 ml/hr |
| 15 kg | 225 ml | 45 ml/hr | 48 ml/hr | 75 ml/hr | 52 ml/hr |
| 16 kg | 240 ml | 48 ml/hr | 51 ml/hr | 80 ml/hr | 54 ml/hr |
| 17 kg | 255 ml | 51 ml/hr | 54 ml/hr | 85 ml/hr | 56 ml/hr |
| 18 kg | 270 ml | 54 ml/hr | 58 ml/hr | 90 ml/hr | 58 ml/hr |
| 19 kg | 285 ml | 57 ml/hr | 61 ml/hr | 95 ml/hr | 60 ml/hr |
| 20 kg | 300 ml | 60 ml/hr | 64 ml/hr | 100 ml/hr | 63 ml/hr |
| 25 kg | 375 ml | --- | --- | --- | 68 ml/hr |
| 30 kg | 450 ml | --- | --- | --- | 73 ml/hr |
| 35 kg | --- | --- | --- | --- | 78 ml/hr |
| 40 kg | --- | --- | --- | --- | 83 ml/hr |
| 45 kg | --- | --- | --- | --- | 88 ml/hr |
| 50 kg | --- | --- | --- | --- | 94 ml/hr |

**Pediatric Infusion Rate**: 2 to 5 ml/kg/hr

*Maintenance rate is used only as a guideline.
For the non-compromised child, the infusion rate may be increased to 1.5 times the maintenance rate.

All Pediatric Oncology patients should receive irradiated PRBC's.

Appendix C

## OUTPATIENT INSTRUCTIONS

## AFTER THE BLOOD TRANSFUSION PROCEDURE

"You may resume your normal activities 4 - 6 hours after your blood transfusion. Reactions to a blood transfusion may sometimes be delayed.

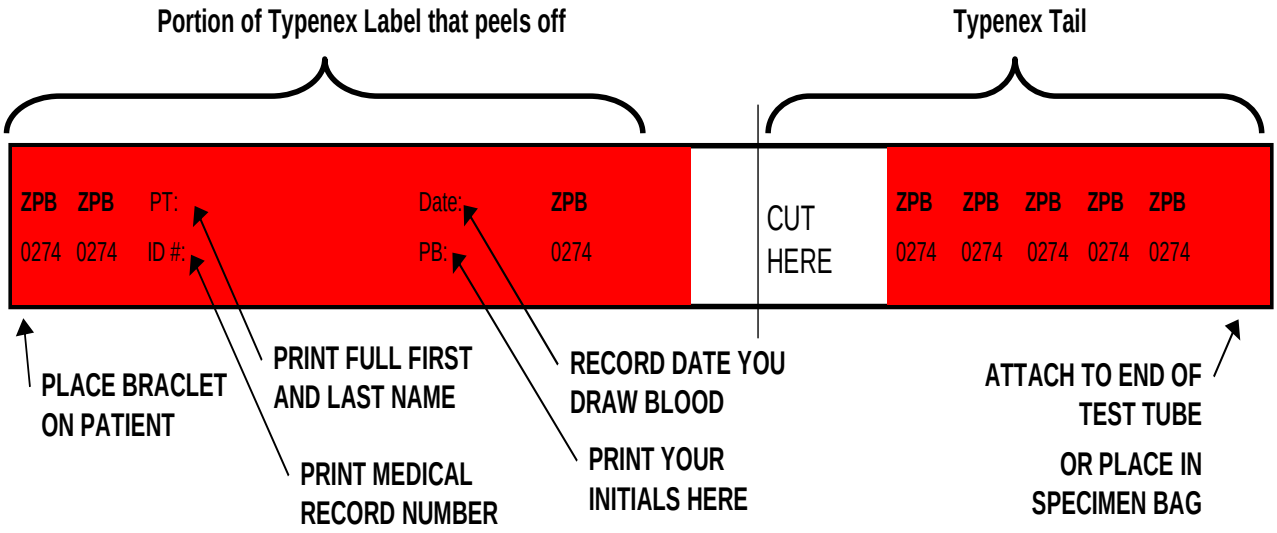
- If you develop fever, with or without chills in the next 48 hours, you could be experiencing a delayed transfusion reaction.
- If you notice dark urine, yellow skin, or feel unusually tired during the next 2 weeks, you could be experiencing a delayed transfusion reaction.

If you think you are experiencing a delayed reaction to your transfusion, call a member of your health care team immediately.

NAME: _____

PHONE NUMBER: _____

# HOW TO LABEL A TYPENEX BAND




1. Affix patient's Bar Code Label to specimen tube and prepare Typenex band as shown above.
2. Perform two-person check to verify that Typenex band is complete and matches patient's Bar Code Label . With second person, verify the accuracy of each handwritten letter and number on the Typenex label against MCP or medical order. (NOTE: Phlebotomy staff may perform the two-person verification step after the blood is drawn and the Typenex has been attached.)
3. Verify patient's identity, using two identifiers (patient's name and date of birth).
4. Collect specimen (6 mL plastic lavender-top tube).
5. Affix Typenex label to the specimen tube, verifying that the two labels match, and attach Typenex band to patient's wrist. The size of the band can be adjusted to fit a small or large wrist.
6. Instruct inpatients and outpatients not to remove band.
7. Attach Typenex Tail to the specimen tube or place in specimen transport bag. To process specimen, DTM requires that at least one (1) of the unique numbers coded on the Typenex band and tail is sent. Send to tube station 3D. Don't forget to send the Order Requisition with your tube.
8. Type and cross is valid until midnight of the 3rd day.